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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/716,199

11/17/2003

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MIPFP065

4121

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06/27/2007

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EXAMINER

DURNFORD GESZVAIN, DILLON

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

06/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 10/716,199 | Applicant(s) KOIZUMI ET AL. | |
| | Examiner Dillon Durnford-Geszvain | Art Unit 2622 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>10/28/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101.

... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 10 is drawn to functional descriptive material recorded on a computer readable medium. Normally, the claim would be statutory. However, the specification, at page 3 lines 1-7, defines the claimed computer readable medium as encompassing statutory media such as “a recording medium on which such a program is recorded” as well as *non-statutory* subject matter such as a “carrier wave”.

Art Unit: 2622

A “signal” embodying functional descriptive material is neither a process nor a product (i.e., a tangible “thing”) and therefore does not fall within one of the four statutory classes of § 101. Rather, “signal” is a form of energy, in the absence of any physical structure or tangible material.

Because the full scope of the claim as properly read in light of the disclosure encompasses non-statutory subject matter, the claim as a whole is non-statutory.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 7 recites the limitation "the preset memory color" in line 15 of the page. There is insufficient antecedent basis for this limitation in the claim.

The Examiner can only assume that the claim is intended to depend from claim 5, as claim 5 is the only claim that contains the limitation of a preset memory color, and the claim will be examined as though it depended from claim 5 instead of claim 1.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2622

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 6 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,313,277 (Suzuki).

Suzuki teaches an image processing method for processing an image using image data produced by an image producing device (see Fig. 2), and image production record information which includes at least information relating to shooting conditions at the time of production of the image data (see Column 3 lines 58-68 and note that at least photometry data is taken), and which is associated with the image data, the method comprising the steps of:

(a) determining a size parameter value that relates to a size of a subject in the image based on at least one of the *image data* and the image production record information (Column 5 lines 52-58 and note that the size parameter value is the occupied area of a single object); and

(b) performing color balance adjustment processing of the image data based on the size parameter value (Column 5 lines 59-65, for example shows that the processing is different for subjects of different size, i.e. the voltages of Rc and Bc, which are used as control signals for the R and B gain control units [see Column 4 line 62 to Column 23], are narrowed when the occupied area is large).

As to claim 2, see the rejection of claim 1 and note that Suzuki further teaches an image processing method according to claim 1, wherein the color balance adjustment processing is performed for the entirety of the image (Column 5 lines 59-68 and Column 6 lines 46-55).

As to claim 3, see the rejection of claim 1 and note that claim 1 specifies using image data or image production record information and the limitation was met by Suzuki's teaching of

Art Unit: 2622

using image data to determine a size parameter and therefore the limitation of claim 3 is extraneous as it is not further limiting of claim 1 in the instant case.

As to claim 4, see the rejection of claim 1 and note that claim 1 specifies using image data or image production record information and the limitation was met by Suzuki's teaching of using image data to determine a size parameter and therefore the limitation of claim 3 is extraneous as it is not further limiting of claim 1 in the instant case.

As to claim 6, see the rejection of claim 1 and note that Suzuki further teaches an image processing method according to claim 1, wherein the step (b) includes the step of adjusting a processing amount of the color balance adjustment so that the processing amount increases with an increase in the size of the subject indicated by the size parameter value (Column 5 line 63 to Column 6 line 3 and note that the processing amount is therefore increased as this step is not carried out when the object is not large).

Claim 9 is an apparatus that corresponds to the method of claim 1 and therefore is rejected on the same grounds but drawn to an apparatus.

Claim 10 is a computer program product that performs the steps of the method of claim 1 and therefore is rejected on the same grounds as the method of Suzuki is carried out using a microcomputer 13 (see Column 4 lines 1-8) and therefore must necessarily use a program to perform the method.

Claim 11 essentially is an output device for outputting image data processed by the method of claim 1 with an apparatus corresponding to claim 9 and therefore is rejected on the

Art Unit: 2622

same grounds as claims 1 and 9 as Suzuki discloses such an output device 9 (see Fig. 1, Column 2 lines 13-18 and Column 3 lines 62-68).

7. Claims 1, 2, 5, 7 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,249,317 (Hashimoto et al.).

As to claim 1, Hashimoto et al. teaches an image processing method for processing an image using image data produced by an image producing device (see Fig. 3), and image production record information which includes at least information relating to shooting conditions at the time of production of the image data (see Column 5 lines 54-67 and note that it at least records the amount of high saturation pixels of each color and the number of skin-colored pixels), and which is associated with the image data, the method comprising the steps of:

(a) determining a size parameter value that relates to a size of a subject in the image based on at least one of the image data and the *image production record* information (Column 7 lines 9-17)); and

(b) performing color balance adjustment processing of the image data based on the size parameter value (Column 6 line 56 to Column 7 line 17 and note that the color balance is adjusted differently for different parts of the sensor when the count value N_f is equal to or larger than a predetermined value, i.e. when the subject area is large).

As to claim 2, see the rejection of claim 1 and note that Hashimoto et al. further teaches an image processing method according to claim 1, wherein the color balance adjustment processing is performed for the entirety of the image (Column 7 lines 9-17 and note that the color balance of the whole image is adjusted based on different regions).

As to claim 5, see the rejection of claim 1 and note that Hashimoto et al. further teaches an image processing method according to claim 1, wherein the step (a) includes the steps of: calculating a proportion of pixels (number Nf) that have a color close to a preset memory color (skin color, for example) by analyzing the image data (see Column 6 lines 56-67); and selecting the proportion as the size parameter value (Column 7 lines 9-17).

As to claim 7, see the rejection of claim 5 (see the rejection of claim 7 under 5 USC 112 above) and note that Hashimoto et al. further teaches an image processing method according to claim 1, wherein the step (b) includes the steps of:

(i) determining magnitudes of differences of respective color components of pixels that have colors close to the preset memory color from respective color components of a preset target color in the image data by analyzing the image data (Column 6 lines 18-23, note that the ratio of the colors is considered to be the difference between the color and a target color, i.e. skin color); and

(ii) adjusting a processing amount of the color balance adjustment in accordance with the magnitudes of the differences (Column 6 lines 18-23, note that the counter Lf is counted up according to how much of the signal is skin colored);

and wherein the step (ii) includes the step of adjusting a proportion of the processing amount of the color balance adjustment with respect to the magnitudes of the differences so that the proportion is increased as the size of the subject indicated by the size parameter value increases (Column 6 line 56 to Column 7 line 17 and note that the color balance is adjusted

Art Unit: 2622

differently for different parts of the sensor when the count value N_f is equal to or larger than a predetermined value, i.e. when the subject area is large

As to claim 8, see the rejection of claim 1 and note that Hashimoto et al. further teaches an image processing method according to claim 1, wherein the method further comprises the steps of:

judging whether or not operating settings of the image producing device at the time of the production of the image data are suitably set for portrait images by analyzing the image production record information in cases where the image production record information includes shooting mode information relating to the operating settings (Column 6 lines 56-67, note that the count values correspond to record information and the saturation amount determines whether the device is suitably set for portrait images); and

performing the step (b) in cases where the judgment is affirmative (note that this limitation does not preclude performing step (b) in cases where the judgement is negative, and therefore as Hashimoto et al. performs color balance processing regardless of the count values it discloses this feature, see Column 7 lines 9-17).

Claim 9 is an apparatus that corresponds to the method of claim 1 and therefore is rejected on the same grounds but drawn to an apparatus.

Claim 10 is a computer program product that performs the steps of the method of claim 1 and therefore is rejected on the same grounds as the method of Hashimoto is carried out using a CPU 314 (see Column 5 lines 54-67) and therefore must necessarily use a program to perform

Art Unit: 2622

the method.

Claim 11 essentially is an output device for outputting image data processed by the method of claim 1 with an apparatus corresponding to claim 9 and therefore is rejected on the same grounds as claims 1 and 9 as Hashimoto et al. discloses such an output device 306 (see Fig. 3 and note that video is outputted from 306).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,072,526 (Hashimoto et al.). US 5,644,359 (Ito). US 6,674,466 (Takaoka).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon Durnford-Geszvain whose telephone number is (571) 272-2829. The examiner can normally be reached on Monday through Friday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dillon Durnford-Geszvain

6/18/2007

/John M. Villecco/

Primary Examiner, Art Unit 2622

June 19, 2007